

FEATURES

- Oxygen pressure range 2 mbar...3 bar
- Zirconium dioxide (ZrO₂) sensing elements
- Non-consumptive technology
- Integral heating element
- No need for temperature stabilisation
- No reference gas required
- Function testing and calibration in ambient air
- High accuracy
- Linear output signal
- Operates with external interface boards



SPECIFICATIONS

Maximum ratings

Heater supply voltage 4.35 ±0.1 V_{DC} (1.85 A)
 Stand by 2.0 V_{DC}

Pump resistance @ 700 °C
 DC typ. 1 kΩ
 AC typ. 1 kHz, 120 Ω

Permissible gas temperature
 XYA1 -100...400 °C
 all others -100...250 °C

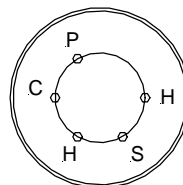
Gas flow rate 0...20 m/s

Repetitive permissible acceleration 5 g

Incidental permissible acceleration 30 g

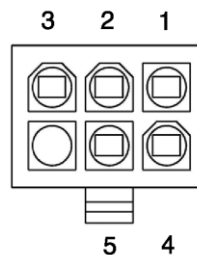
ELECTRICAL CONNECTION

Stainless steel wires (XYA1S)



P: Pump
 C: Common
 S: Sense
 H: Heater

Molex connector (XYA...M)



1: Pump (Red)
 2: Common (Black)
 3: Heater (Yellow)
 4: Sense (Blue)
 5: Heater (Yellow)

XYA Series

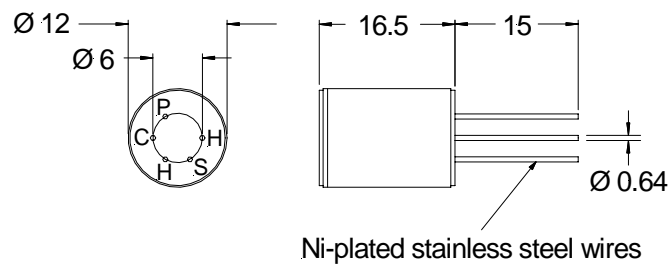
Oxygen sensors

PERFORMANCE CHARACTERISTICS

Characteristics	Min.	Typ.	Max.	Unit
Oxygen pressure range	2		3000	mbar
Accuracy			5	
Operational temperature		700		°C
Stand by temperature		500		
Response time			4	s
Warm up time			100	
Warm up time (from stand by)			20	

OUTLINE DRAWING

Housing type XYA1S

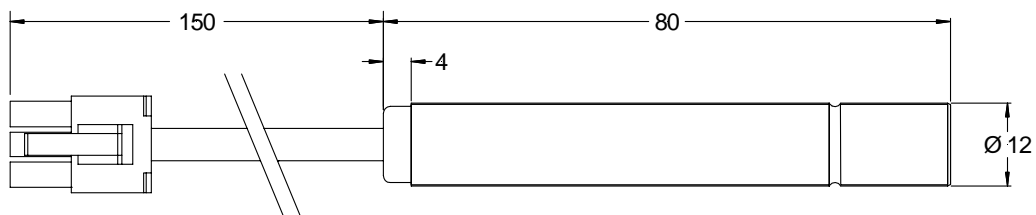


mass: 4 g

dimensions in mm

OUTLINE DRAWING (cont.)

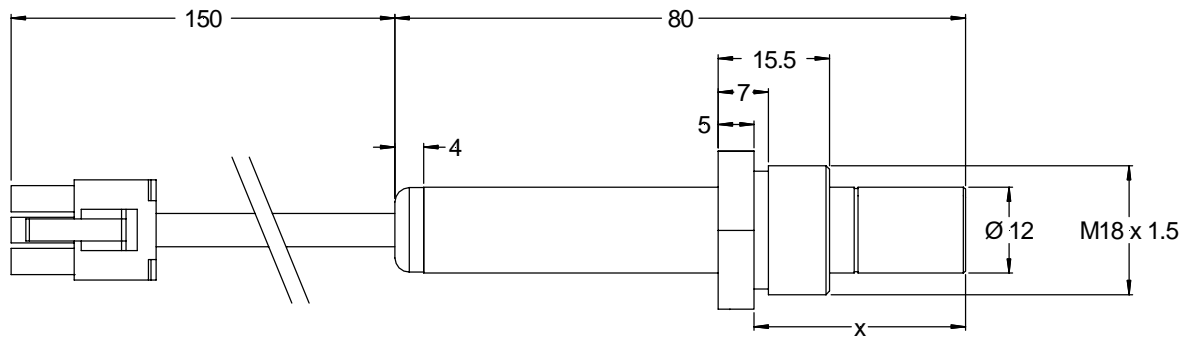
Housing type XYA2M



mass: 24 g

dimensions in mm

Housing types XYA5M, XYA6M, XYA7M



x = 28 mm for XYA5...
x = 45 mm for XYA6...
x = 55 mm for XYA7...

mass: 48 g

dimensions in mm

XYA Series

Oxygen sensors

ORDERING INFORMATION

Options	Series		
	XYA	Housing type	Termination
		1S:	cylinder stainless steel wires
		2M:	probe Molex connector*
		5M:	screw fit probe, M18 x 1.5 (28 mm sensor header) Molex connector*
		6M:	screw fit probe, M18 x 1.5 (45 mm sensor header) Molex connector*
		7M:	screw fit probe, M18 x 1.5 (55 mm sensor header) Molex connector*

* Molex mating connector:
39-01-2061 (plastic plug)
39-00-0041 (pins)

Example:	XYA	2M
-----------------	-----	----

Note: Custom specific options are widely available!
Please contact your nearest Sensortechinics sales office for further information.

Sensortechinics reserves the right to make changes to any products herein. Sensortechinics does not assume any liability arising out of the application or use of any product or circuit described herein, neither does it convey any license under its patent rights nor the rights of others.